APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C.
ONE FINANCIAL CENTER
BOSTON, MA 02111

EXAMINER
KANG, INSUN

ART UNIT	PAPER NUMBER
2193	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/609,126	KRUEGER, UWE
	Examiner	Art Unit	
	INSUN KANG	2193	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 December 2008</u>.

2a) ☒ This action is FINAL.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,4-9,12-14 and 16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1, 4-9, 12-14, and 16</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responding to the amendment filed on 12/4/2008.

2.   Claims 1, 4-9, 12-14, and 16 are pending in the application.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1, 4-9, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Huang et al. ("A General Purpose Virtual Collaboration Room," IEEE, pages 1-10,

10/1999) hereafter "Huang" in view of Pirri et al. ("A Java applet-based virtual environment as a

usable interface to distributed services and collaborative applications on the Internet," IEEE,

6/1999) hereafter Pirri.

Per claim 1:

Huang discloses:

-a virtual object space providing access to a plurality of objects, each object having a

   set of functionality and being identifiable by a unique identifier provided by the virtual object

space (i.e. page 2, right col., paragraph 2) and providing generic object functionality for the

plurality of objects (i.e. page 2, right col., paragraph 1) including an associations and

transactions functionality for relating objects and interaction between objects (i.e. page 3, section

2. An overview of the VCR, first paragraph, lines 1-7; page 2, right col., paragraph 2); a distribution functionality for locking, flushing, and copying of the virtual object space (i.e. page 9, left col., lines 1-20) ; and persistency functionality for maintaining persistency of the objects (i.e. page 5, right col., section 3.2 Object manipulation, paragraph 4);

Huang does not explicitly teach a first interface for applications using the plurality of objects and a second interface for service deploying the plurality of objects. However, Pirri teaches proving an interface to distributed internet applications and services in a virtual collaboration environment was known in the pertinent art, at the time applicant's invention was made, to enable applications to use objects in the virtual space and distribute the objects (i.e. page 859, left col., second paragraph). It would have been obvious for one having ordinary skill in the art to modify Huang's disclosed system to incorporate the teachings of Pirri. The modification would be obvious because one having ordinary skill in the art would be motivated to allow distributed applications to access the virtual room in Huang and enable services to deploy the virtual objects.

Pirri further discloses the service providing an adapter to map the unique identifier to the plurality of objects and to objects internal to the service (i.e. page 859, left col., second paragraph; 860, right col., fourth par.).

Huang further discloses: the access being a virtual access provided using the unique identifier without physically storing the plurality of objects at the virtual object space (i.e. page 2, right col., paragraph 2); and a visualization framework for visualizing the plurality of objects independently of an application implementing the object, each object being visualized using the

object's unique identifier and according to the object's corresponding set of functionality (i.e. Fig.

1; page 6, right col., second paragraph).

Per claim 4:

The rejection of claim 1 is incorporated, and further, Huang teaches:

-framework services providing common event handling of the plurality of objects(i.e. page 5, left

col., lines 19-22).

 Per claim 5:

This is another framework version of claim 1, respectively, and is rejected for the same reasons

set forth in connection with the rejection of claim 1.

        Huang further discloses a user interface for receiving input from a user relating to a

desired arrangement of one or more of the plurality of objects (i.e. Fig. 1; page 3, left col.,

section 2. An Overview of the VCR, first paragraph; lines 11-13) and a visualization framework

for visualizing objects according to the desired arrangement, each object being visualized using

the object's unique identifier independently of an application implementing the object (i.e. Fig. 1;

page 6, right col., second paragraph).

Per claim 6:

Huang further teaches:

- wherein the user interface further includes allowing a user to browse the ;plurality of objects

independent of one or more applications implementing the objects (i.e. Fig. 1; page 3, left col.,

second paragraph, lines 1-6).

Per claim 7:

The rejection of claim 5 is incorporated, and further, Huang teaches:

- the desired arrangement is hierarchical(i.e. page 3, section 2. An overview of the VCR, first

paragraph, lines 9-11).

Per claim 8:

The rejection of claim 5 is incorporated, and further, Huang teaches:

- the visualization framework includes an object viewer(i.e. page 4, paragraph 2, lines 1-5, 13-

19);

Per claim 13:

The rejection of claim 1 is incorporated, and further, Huang teaches:

- providing a portlet to access the generic object functionality to visualize the structure of the

plurality of objects(i.e. Fig 1 in page 4).

     Per claims 9, 12, and 14, they are the method versions of claims 1, 4, 13 respectively, and

are rejected for the same reasons set forth in connection with the rejection of claims 1, 4, and 13

above.

     Per claim 16:

Pirri further discloses:

- implementing the plurality of objects to include the first interface accessible by the
framework and the second interface accessible by a service acting as an adapter
between the framework and an application separate from the framework (i.e. page 859, left col.,
second paragraph).

Response to Arguments

5.   Applicant's arguments filed on 12/4/2008 have been fully considered but they are not
persuasive.

The applicant states that 1)Huang fails to disclose a virtual object space...providing
generic object functionality for the plurality of objects including an associations and transactions
functionality for relating the plurality of objects and interaction between the plurality of
objects...a distribution functionality for locking, flushing, and copying of the virtual object space
(remark, 7-8).

In response to Applicant's general allegation above, Huang discloses a virtual
collaboration room integrated with a web browser is "an Internet based desktop groupware
system that enables a group of remote individuals to flexibly and naturally conduct their
collaborative...working without constraints on collaboration types...system platforms (abstract,
page 2; see fig.1 and 5)," providing associations and transactions mechanisms (i.e. "support
responsive and effective interactions among users in their collaborations," page 7, right col.).
The objects can be recorded and persisted in the virtual room (page 5, 3.2 Object Manipulation
section). The virtual room framework handles the transaction for object synchronization before
the VOS is persisted by transforming the VOS objects to a particular implementation of the VOS

object (The server program, Java application ...client program, a Java applet will be automatically downloaded to the user's local machine and then make a request to connect to the room server," page 8). When the shared objects in the VCR are accessed by clients, the copies for the same object space of the VCR are used for different clients (in different address spaces) (page 9, left col. second paragraph). The virtual collaboration room framework, therefore, handles the object synchronization for the copies (copying, locking and flushing). The VCR framework recreates (thereby copy) the VCR client application workspace for each client that wants to access to the room. The VCR framework also controls access to shared objects (thereby locking and controls deletion of copies) by clients via the coordinator and other assistants in the VCR server (see Fig. 5; "when a user exits the room, the client program exits from the user machine and the related assistant is accordingly removed from the room server," page 9, first par.; 3.3 Object Destruction, page 5).

In response to the applicant's general allegation that Huang and Pirri do not disclose the service providing an adapter to map the unique identifier to the plurality of objects and to objects internal to the service, the instant specification recites that the service acts as an adapter between a legacy and the object framework (0058). Pirri discloses the Service server links the external services to the VERSA environment through a service interface where a user makes an explicit request to the Service Server for VERSA services (i.e. page 860, right col.).

The applicant states that Huang clearly teaches away from the feature, "a virtual object space providing access to a plurality of objects...the access being a virtual access provided using the unique identifier without physically storing the plurality of objects at the virtual object space," by stating that the object can be persisted in the virtual room (remark, 8).

In response, Huang indeed discloses the virtual object persistency in the virtual room object framework as in the instant invention. The instant invention recites that the virtual object space provides the persistency functionality for maintaining persistency of the plurality of objects (see claim 1). Both Huang and the instant invention use the virtual object space (VCR) that does not have physical representation where objects identified by a unique ID in the virtual object space are virtually accessed without being physically stored. The applicant is reminded that both Huang and the instant invention are directed to a "virtual" object space, not a physical space. Therefore, Huang does not physically store the objects in the virtual room.

The applicant states that Pirri merely discloses a single interface rather than the claimed first and second interface configuration noted above with respect to claim 1 (remark, 10).

In response, Pirri's discloses virtual environment for remote services access providing a user an interface to access and use the shared objects in the virtual environment (page 858) on the Internet through a Java-enabled browser (page 861). As the applicant acknowledges, Pirri also discloses a service interface for deploying the virtual objects (i.e. page 859). Therefore Pirri discloses an interface for applications and services ("an interface to distributed internet applications and services," page 859).

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The

examiner can normally be reached on M-F 8:30-5 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300. Information

regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from

a USPTO Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Examiner, Art Unit 2193